East Pond Watershed Restoration Project - Phase II

#2003R-20

Waterbody Name: East Pond

Location: Oakland and Smithfield –

Kennebec and Somerset Counties

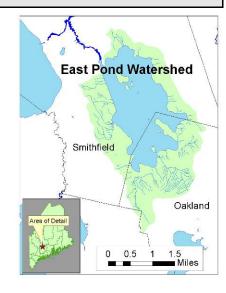
Waterbody Status: Impaired, NPS Priority Watershed

Project Grantee: Belgrade Regional Conservation Alliance

Project Duration: June 2003 – February 2007

319 Grant Amount: \$64,321

Local Match: \$55,173



PROBLEM:

East Pond, which lies at the top of the Belgrade Lakes chain, has a surface area of 1,670 acres and a direct watershed of 4.2 square miles. East Pond has impaired water quality due to algal blooms. The water quality assessment by DEP in 2006 indicated that water quality is stable, but poor. The DEP completed a Total Maximum Daily Load (TMDL) report in October 2001. According to the TMDL report, phosphorus problems in East Pond are due in part to the shallow depth of the pond that allows for recycling of phosphorus from the lake bottom. Phosphorus sources in the watershed include roads, shoreline development and septic systems.

A 2000 watershed survey by the Belgrade Region Conservation Alliance (BRCA) identified a total of 56 NPS sites. The breakdown by land use was: residential and driveway (47%), camp roads (17%), town roads (6%), boat access (6%) and eroding beaches (16%). A Phase I implementation project was completed on East Pond and North Pond from 2001- 2004. Conservation practices were installed on 24 sites, and an additional 20 smaller sites were addressed by the BRCA Conservation Corps.

PROJECT DESCRIPTION:

The Phase II project targeted roads, since roads are one of the primary sources of NPS runoff. Fixing roads also addresses adjacent driveways and parking area problems. By partnering with the East Pond Association, the BRCA was able to address two long driveways and 16 of the 20 camp roads in the watershed. The BRCA Conservation Corps installed seven vegetative buffers at shoreline sites. Technical assistance was provided to property owners and camp road associations, beyond those that participated in cost share projects.



Another goal of the project was to hold a road maintenance workshop with each of the road associations receiving cost share funds. This did not happen, in part due to staff changes at Kennebec County SWCD, the project partner coordinating the workshops. However, road association workshops were held in 2004 and 2005. These workshops covered road maintenance and legal requirements for establishing a road association. A third phase of 319-funded restoration work began in the East Pond watershed in 2007.

PROJECT OUTCOMES:

- The project helped fund the installation of best management practices on a total of 16 camp roads and two driveways (4.3 miles of road). For each road, multiple best management practices were installed including culvert replacements, inlet and outlet protection, sediment basins, ditch stabilization and turnouts, and road surface crowning/resurfacing.
- The BRCA Conservation Corps installed seven buffers (800 square feet) on shoreline residential sites.
- Technical assistance was provided to 35 property owners and three camp road associations.
- Two road association development workshops provided training to 25 camp road owners.
- Pollutant load calculations estimated that 11.4 tons of sediment and 4.6 pounds of phosphorus were reduced due to installation of road BMPs (US EPA Region 5 Method and WEPP Method).



Loon Nest Estates Road – Prior to construction, runoff was trapped on road, which led to erosion of the road surface. Project resurfaced and shaped road and installed ditches.



BRCA Conservation Corps stabilized eroding shoreline with riprap and buffer vegetation

PROJECT PARTNERS:

East Pond Association Kennebec County SWCD

CONTACT INFORMATION:

Mary Ellen Dennis, DEP - (207) 287-7729, mary-ellen.c.dennis@maine.gov Peter Kallin, Belgrade Region Conservation Alliance – (207) 495-6039, brcapk@gwi.net

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